

# Metal Products Business Unit What We Aim to Be and Growth Strategies



**May 28, 2018**

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# Material Issues

## ✓ Six Material Issues

### Social issues to address with priority by leveraging our strengths



**Achieving Harmony with the Global Environment**

To realize recycling-oriented society and mitigate climate change, we are working to establish frameworks for the efficient use of resources and stable supply of renewable energy. In doing so, we will achieve growth in harmony with the global environment.



**Contributing to the Development of Local Communities and Industries**

We steadily procure and provide goods and services to meet the needs of people in various countries and regions and contribute to developing industrial platforms. Through these means, we will create a virtuous cycle in which we can grow and develop together with local communities.



**Establishing a Foundation for Comfortable and Enriching Lifestyles**

We strive to realize more convenient and comfortable lifestyles by providing goods and services for daily use while also responding to needs for high-quality lifestyles in order to support the physical and mental health of people around the world.



**Providing Diverse "Accessibility"**

We provide diverse accessibility to open up the possibility of creating new value. To this end, we will improve mobility for safe and efficient flow of people and goods, and expand the network connecting information and finance.

### Issues for ourselves



**Developing Human Resources and Promoting Diversity**

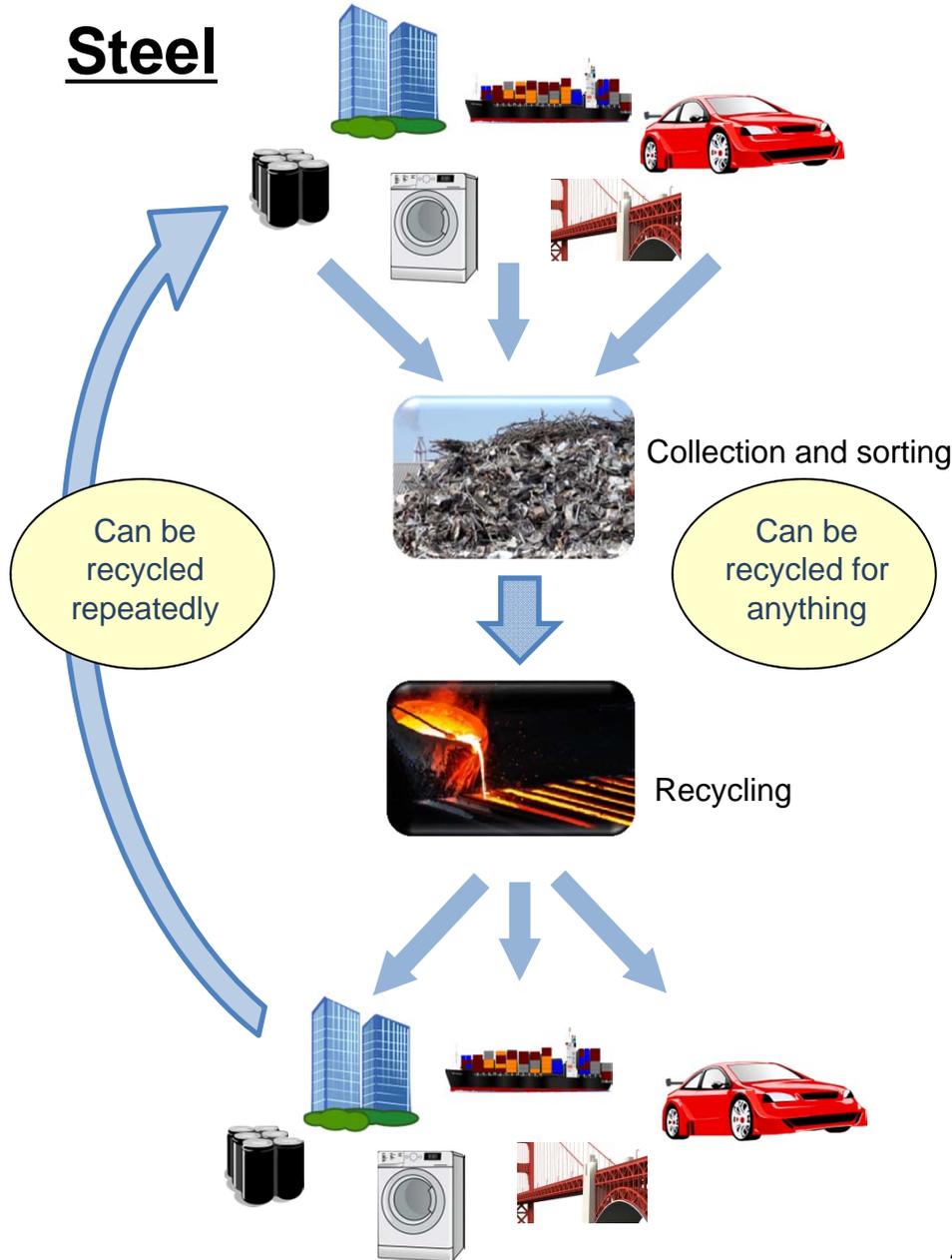
In order to create new value and innovation by allowing our diverse personnel to fully exercise their abilities in a variety of fields, we will promote the development and empowerment of human resources, which represent our most important management resources.



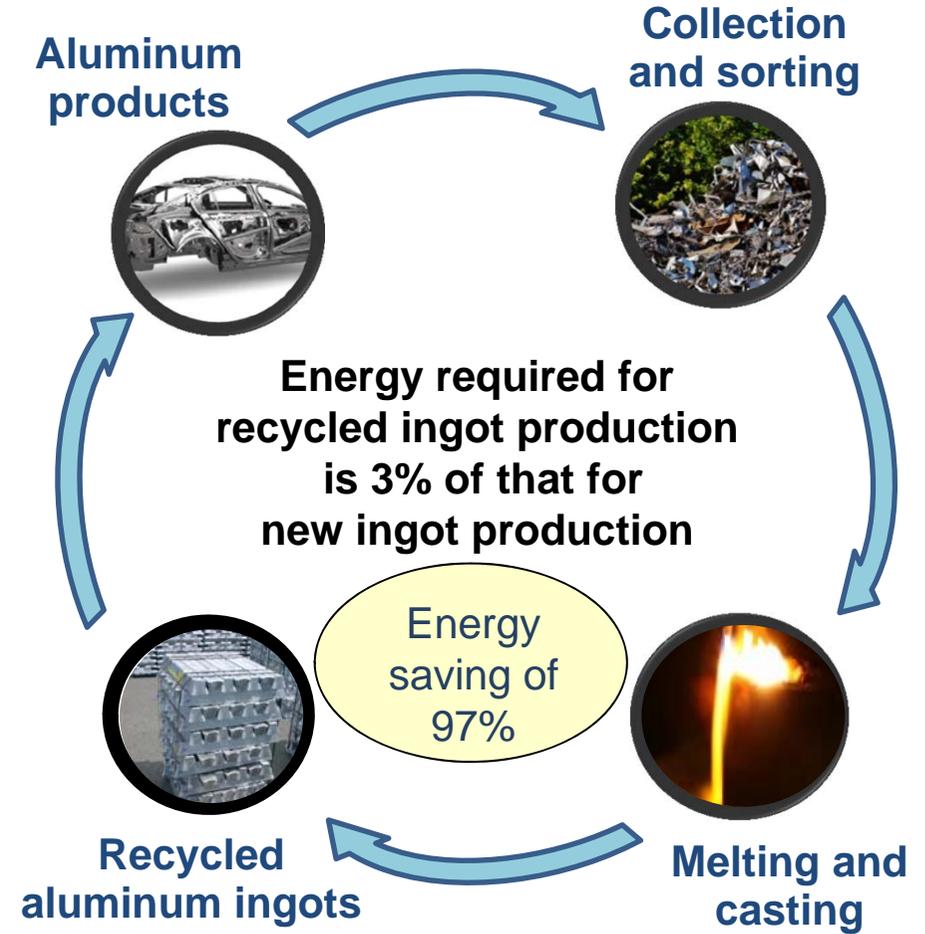
**Enhancing Governance**

We will enhance our ability to draft and implement strategies for achieving sustainable growth and to provide appropriate supervision of these strategies, all while maintaining transparency. In this manner, we will improve management efficiency and maintain sound management.

# Environmental Load of Metals



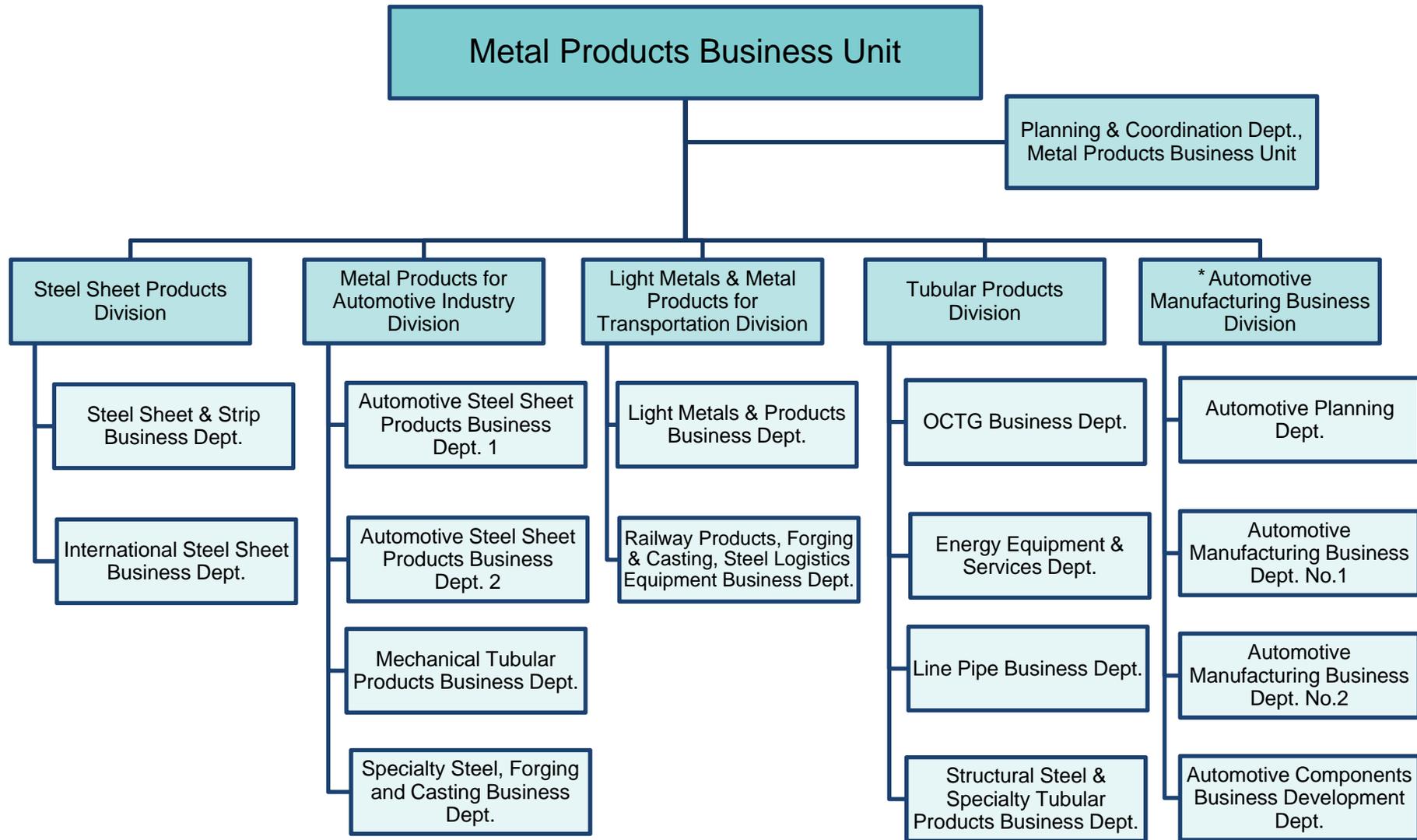
## Aluminum



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# Organization Chart



\* Co-controlled with Transportation & Construction Systems Business Unit

# Steel Sheet Products Division



Sheet processing and sales of hot-rolled steel sheet, cold-rolled steel sheet, electrical sheet, tin plate, surface-treated steel sheet, etc. excluding those for automotive use

For home appliances



For construction



Transformers



Steel frames for solar panels



# Metal Products for Automotive Industry Division



Steel sheet for automotive use

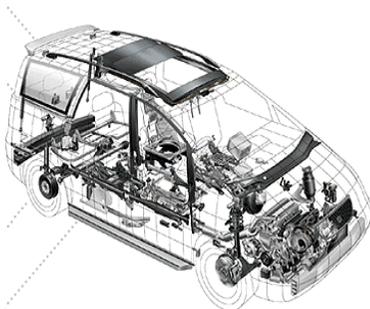
Processing and sales of steel sheet for automotive use, tubular products, wire, specialty steel, tool steel, etc.  
Collaboration with Automotive Manufacturing Business Division



Manufacturing (automotive components and vehicles) (Automotive Manufacturing Business Division\*)

\* Co-controlled with Transportation & Construction Systems Business Unit

Tubular products



# Light Metals & Metal Products for Transportation Division

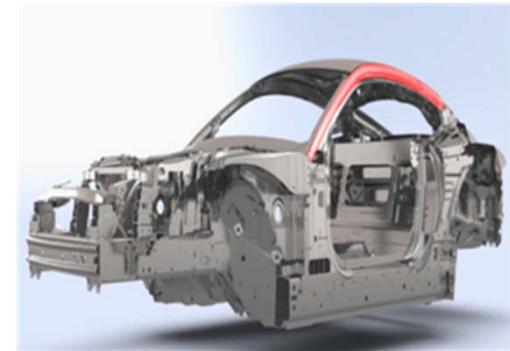
Producing and sales of aluminum ingots and rolled products



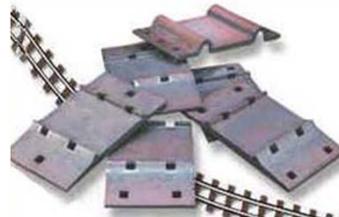
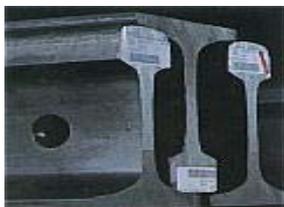
Aluminum for beverage cans



Aluminum for automotive



Sales of rails, bogies and fastenings  
Manufacturing and sales of wheels, axles and tie plates  
Maintenance of axles



Metal products for railways



# Tubular Products Division



- OCTG (Oil Country Tubular Goods)
- Energy Equipment & Services
- Line Pipe
- Specialty Tubular Products
- Plate & Structural Products

Oil & Gas – E&P



Drilling Rigs



Pipeline



Electric Power Stations



Natural gas tanks

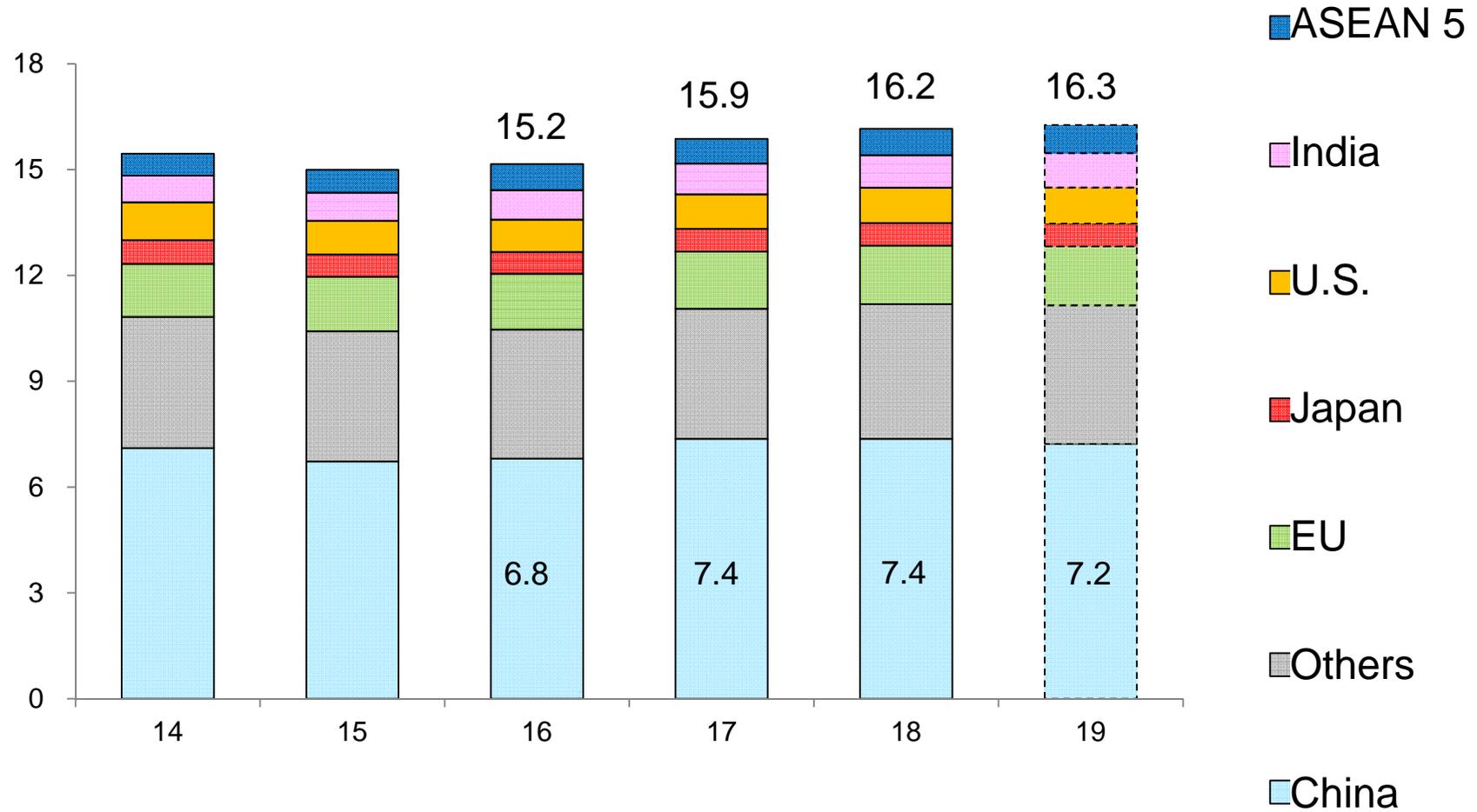


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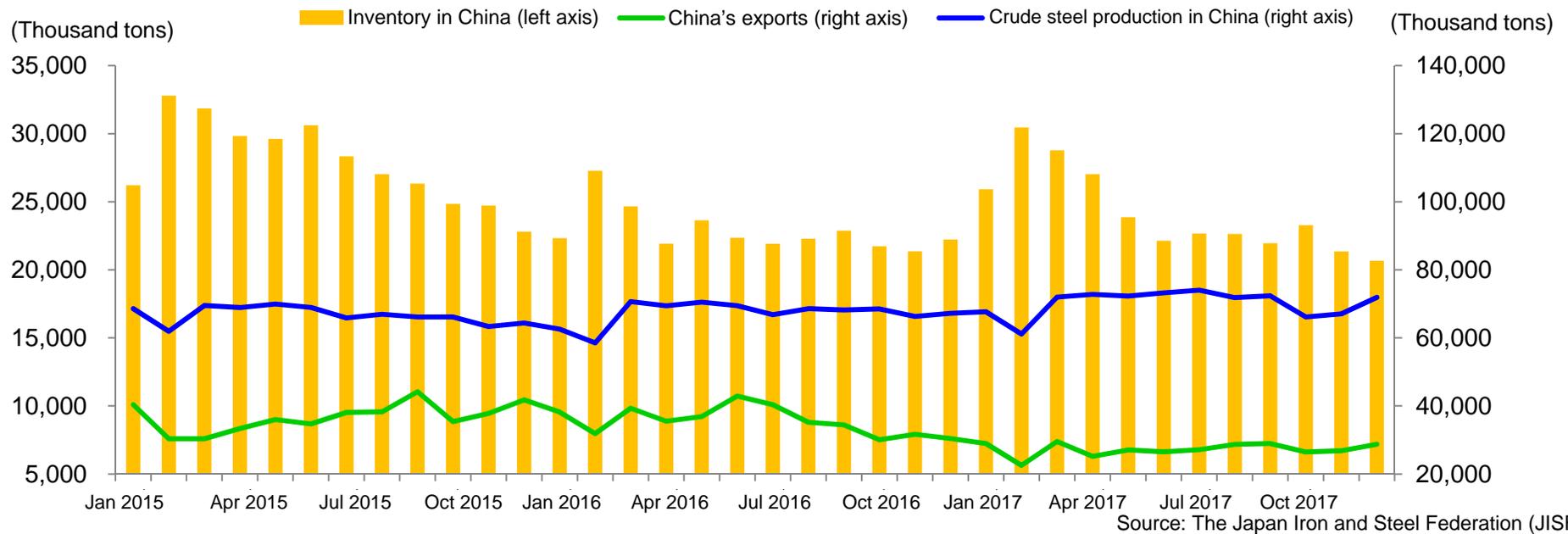
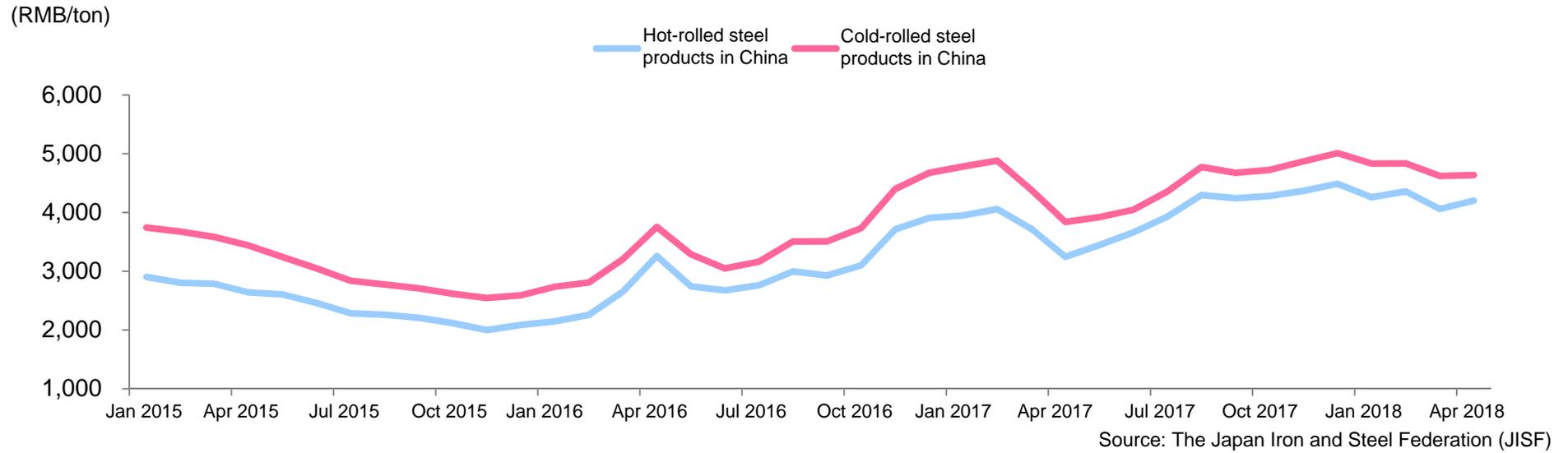
# Changes in Global Steel Product Consumption

(100 million ton)

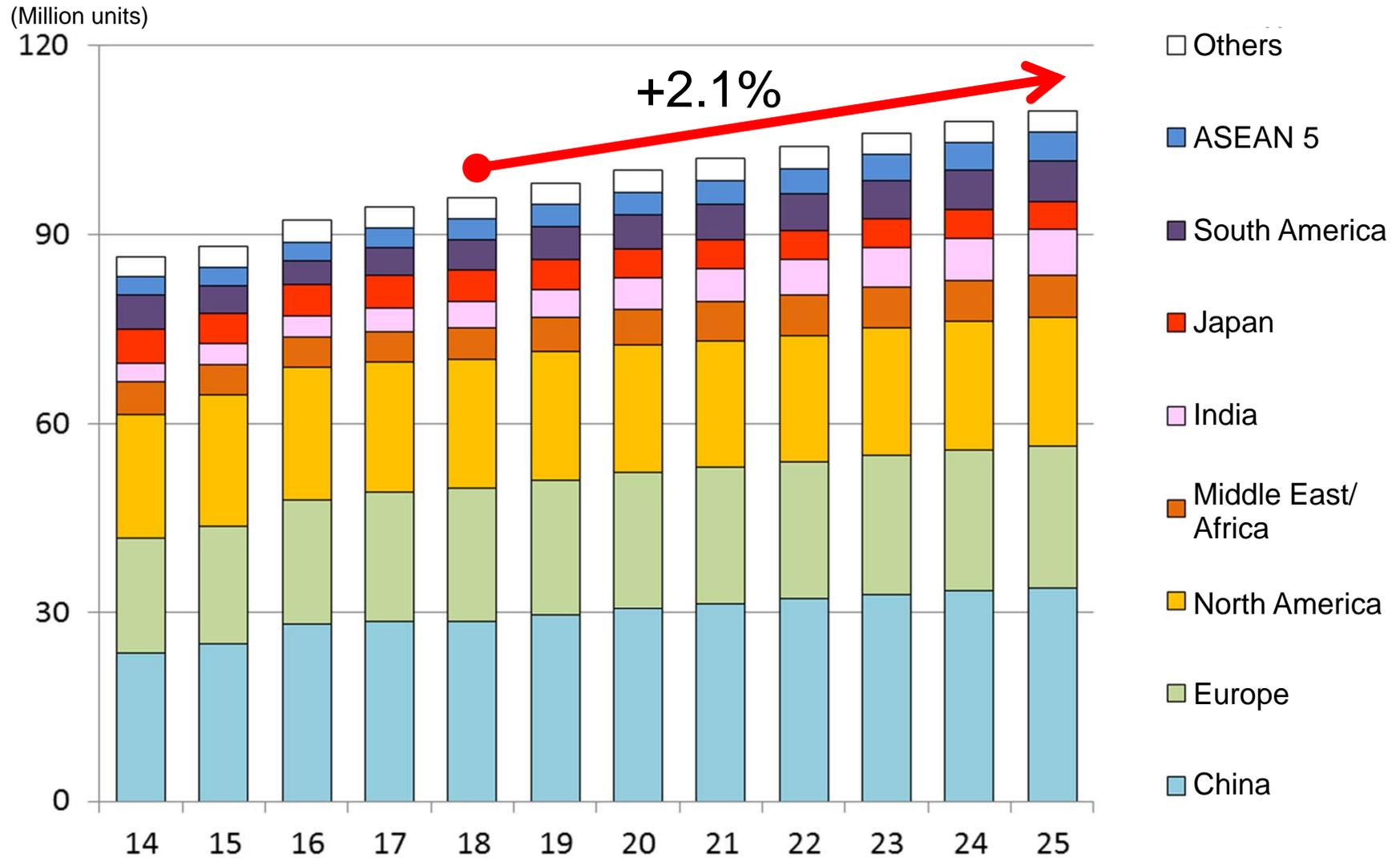


Source: World Steel Association

# Market Trend for Steel Products in China



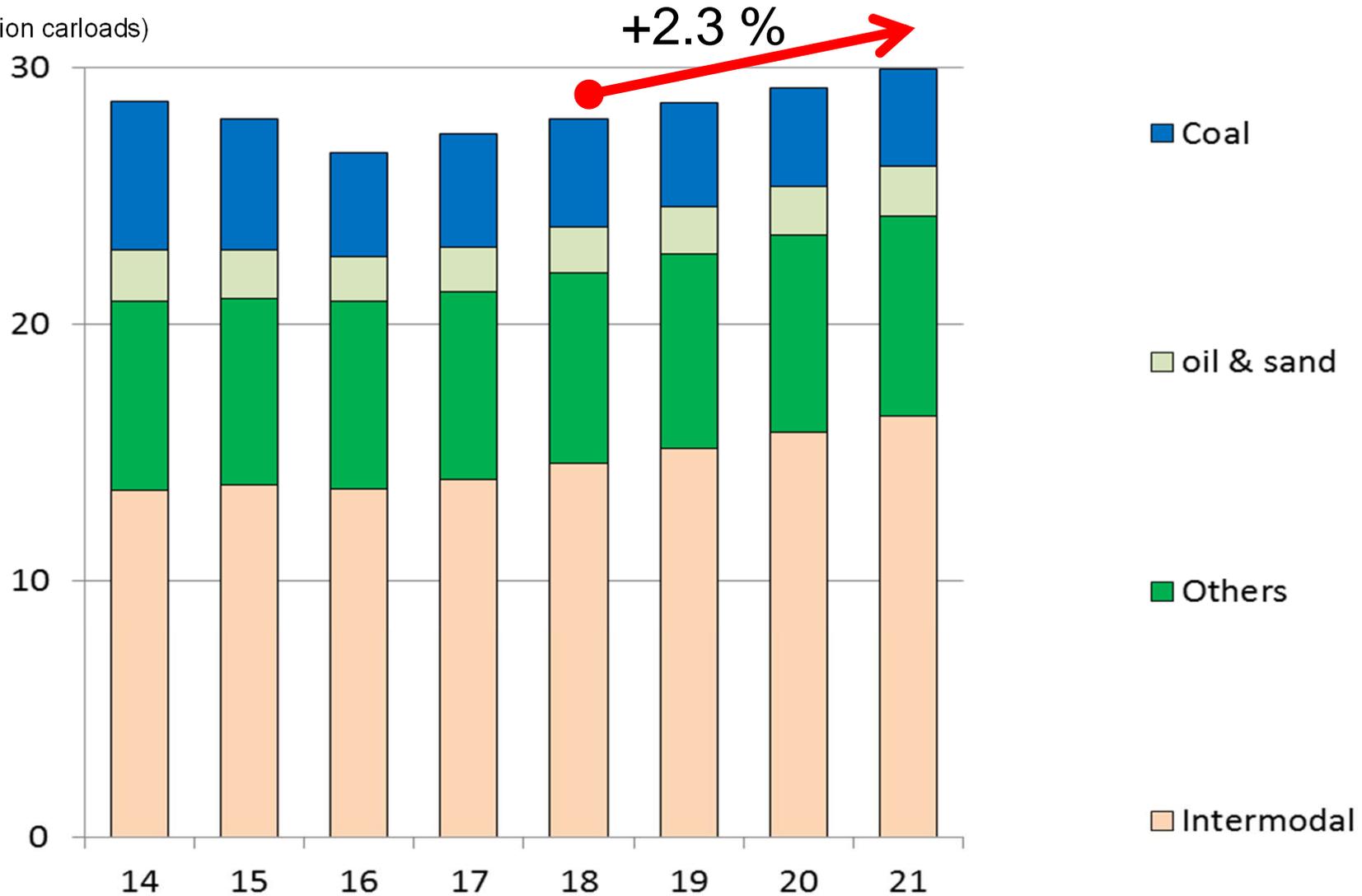
# Changes in Global Automotive Sales



Source: IHS Automotive

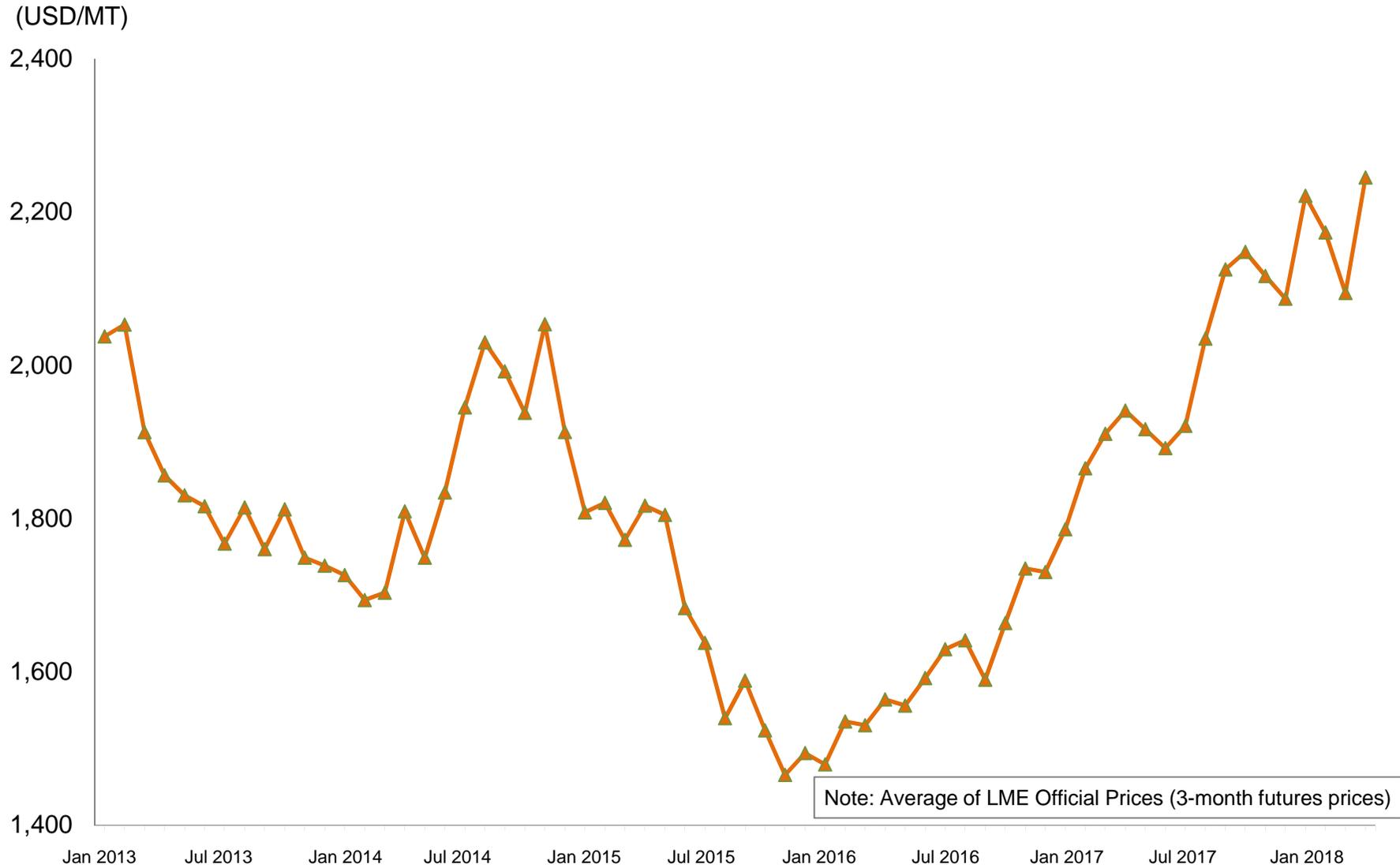
# Historical Data and Outlook of Cargo Transportation Volume in North America

(Million carloads)



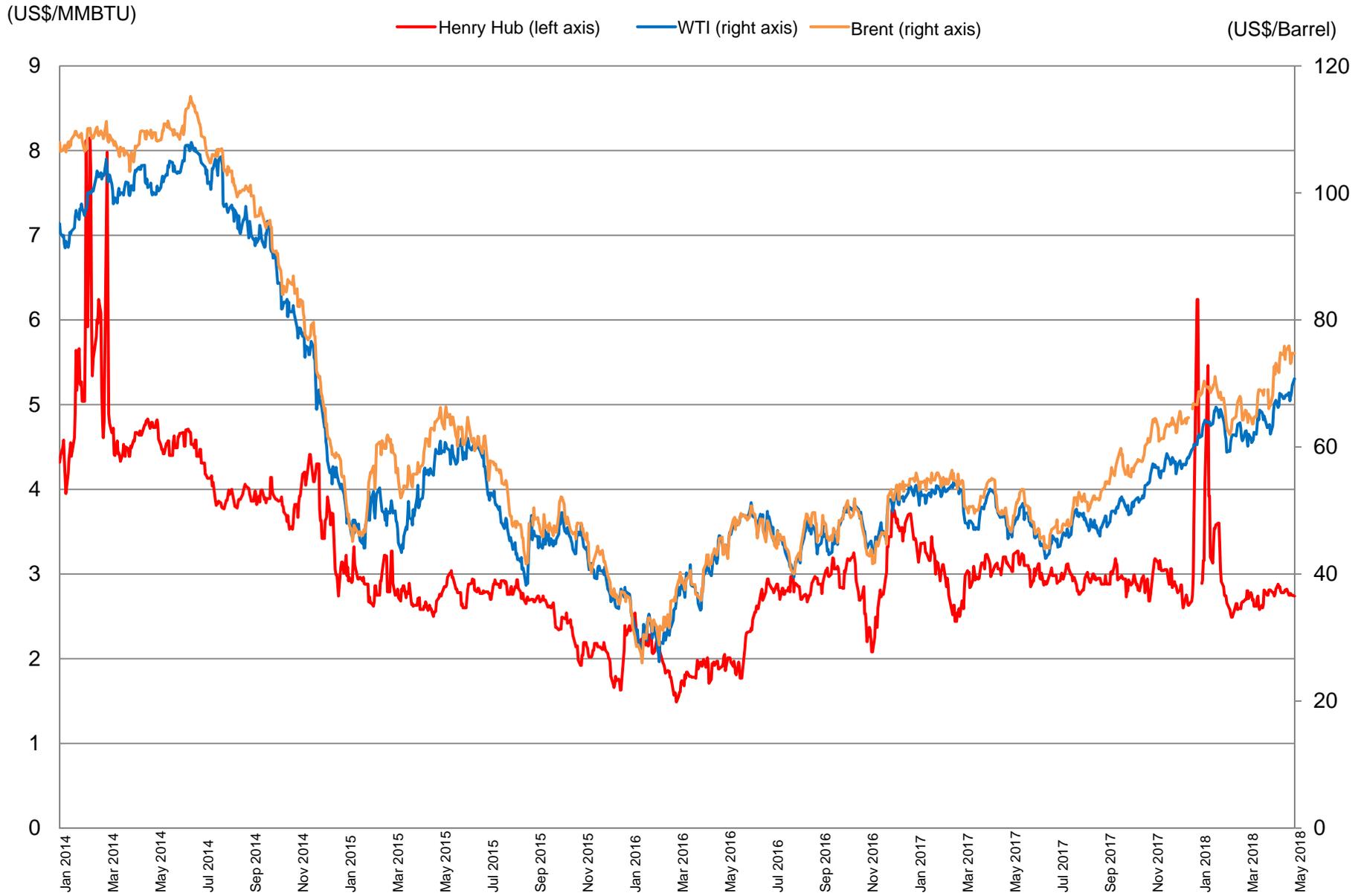
Source: Economic Planning Associates (Data on coal is based on Sumitomo Corporation's forecast for coal market)

# Changes in Aluminum Price



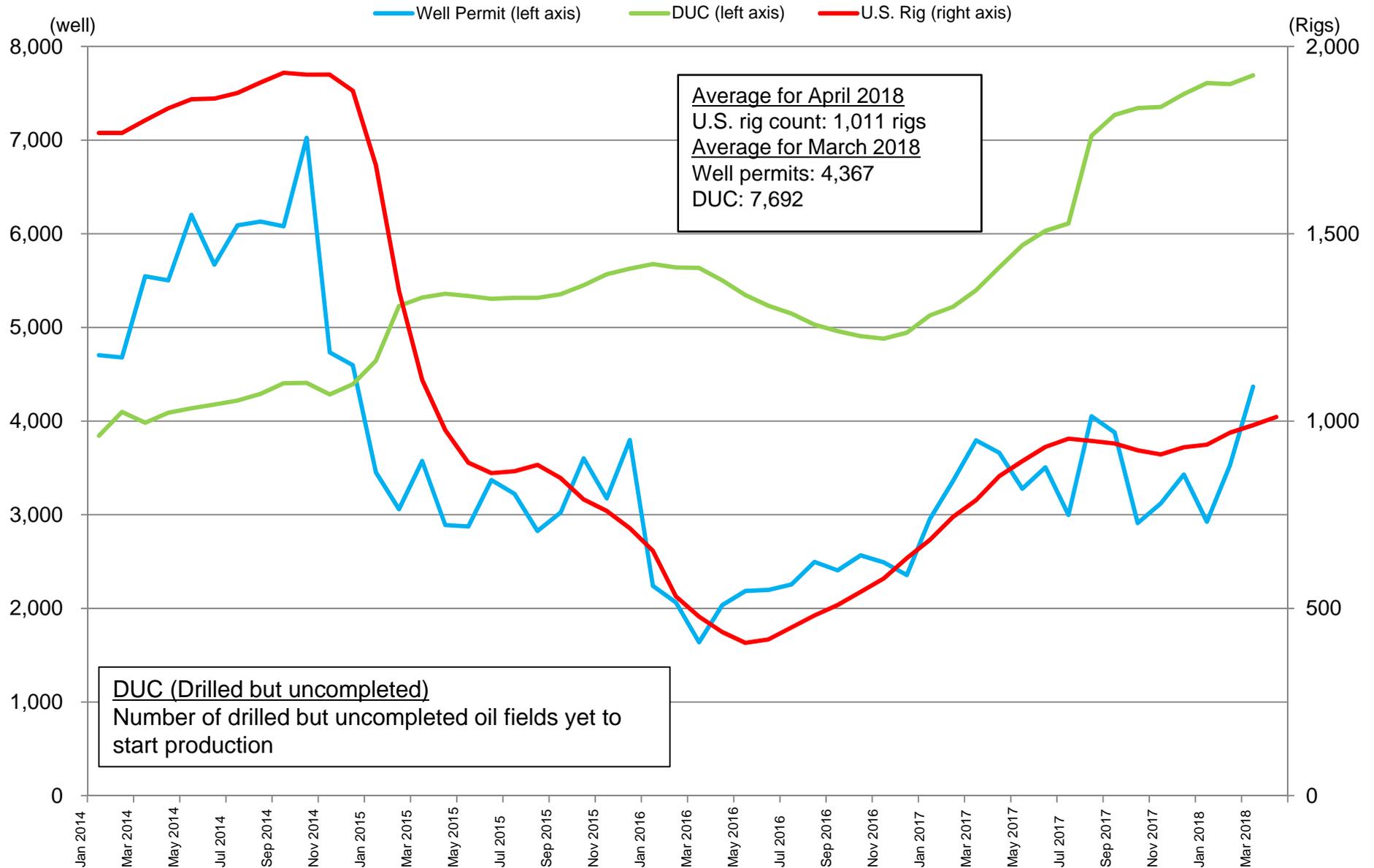
Source: LME Aluminum: Fast Market

# Changes in Crude Oil Prices and Natural Gas Price



Source: EIA

# Changes in U.S. Rig Count, Well Permits and DUC



Source: EIA, Baker Hughes, PipeLogix

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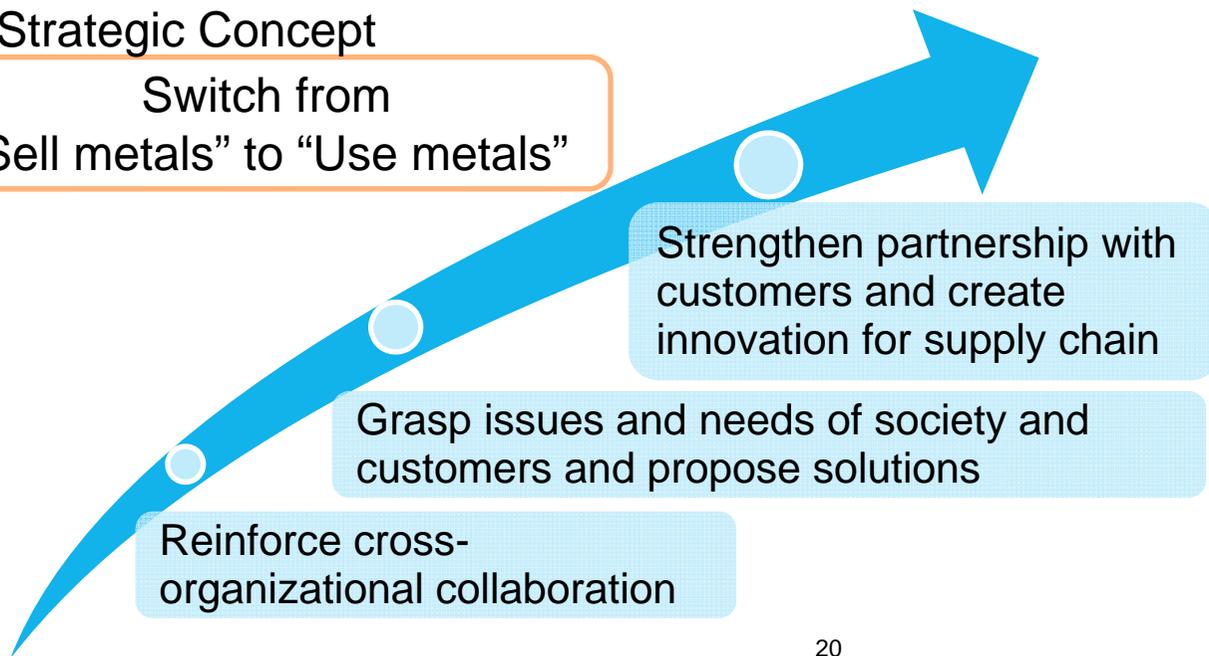
# What We Aim to Be and Strategic Concept

## ➤ What We Aim to Be

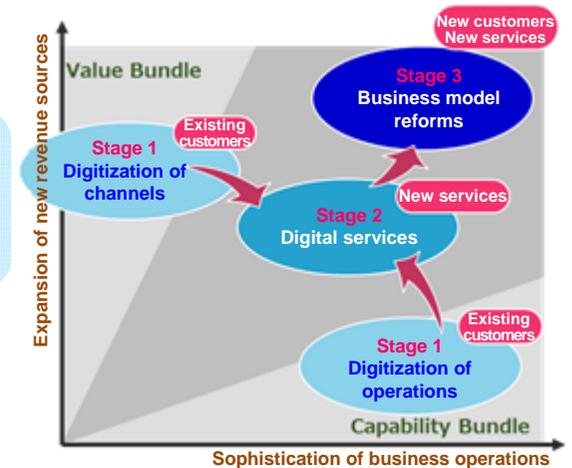


## ➤ Strategic Concept

Switch from "Sell metals" to "Use metals"



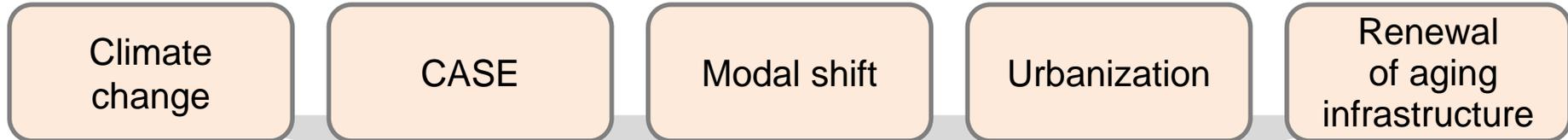
## Digital transformation



# Keywords/Growth Strategies

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➤ Keywords



➤ Growth Strategies

- Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure
- Expansion of value chain in the automotive-related business
- Expansion of value chain in the aluminum-related business
- Provision of multiple service capabilities in the railway related business
- Reinforcement of business platform base and expansion of product lineup for the tubular products business
- Further enhancement of asset efficiency through continuous asset recycle

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## Growth Strategies for Major Businesses

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Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure

Expansion of value chain in the automotive-related business

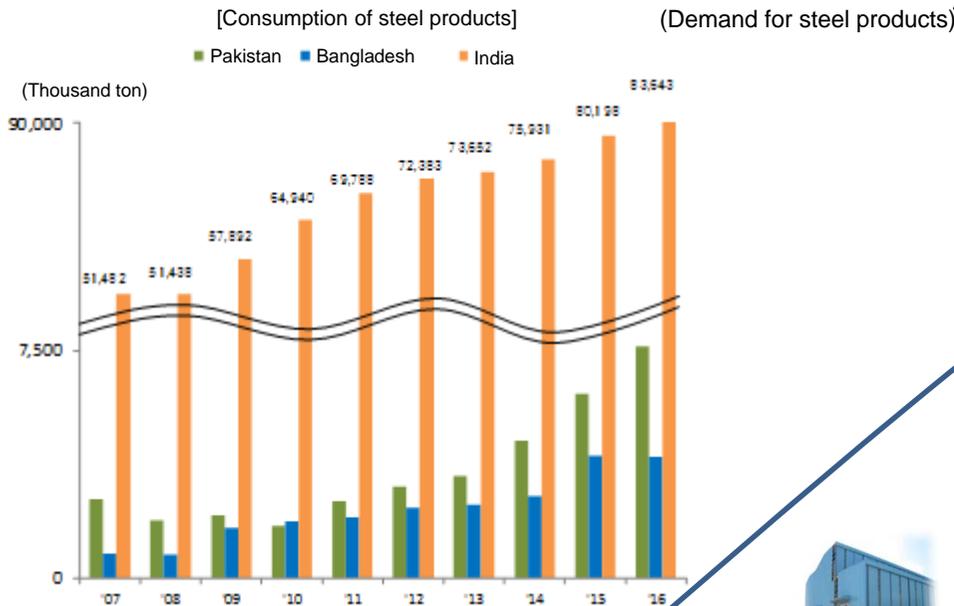
Expansion of value chain in the aluminum-related business

Provision of multiple service capabilities in the railway related business

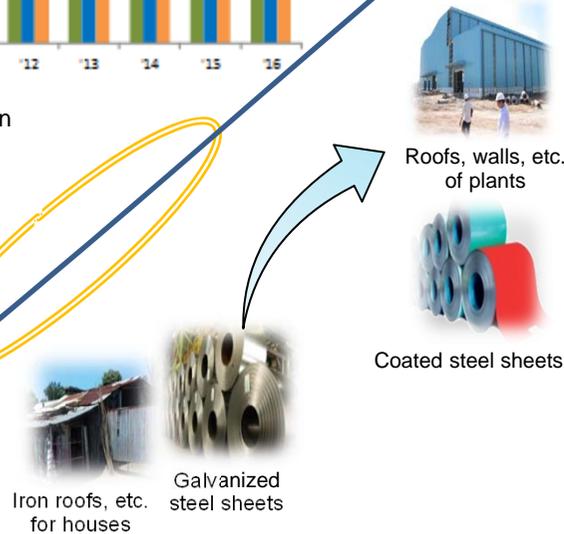
Reinforcement of business platform base and expansion of product lineup for the tubular products business

Further enhancement of asset efficiency through continuous asset recycle

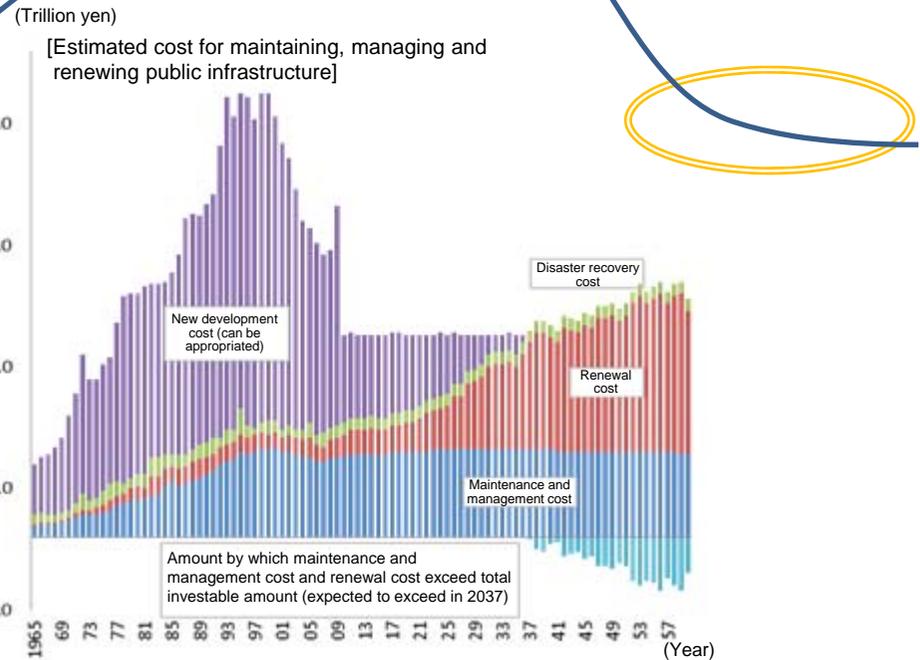
# Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure



Source: World Steel Association



Maintenance and upgrade of social infrastructure such as transportation infrastructure, communication infrastructure, port infrastructure, etc.



Source: Ministry of Land, Infrastructure, Transport and Tourism, "White Paper on Land, Infrastructure, Transport and Tourism in Japan 2012" (Level of development of country/region)

Capture demand for galvanized steel sheets generated by the advancement of urbanization in emerging countries  
 Capture demand for high-value-added products reflecting improved living standards

Renewal and maintenance of infrastructure which are degraded with age  
 Capture maintenance work-related demand

## Growth Strategies for Major Businesses

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Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure

Expansion of value chain in the automotive-related business

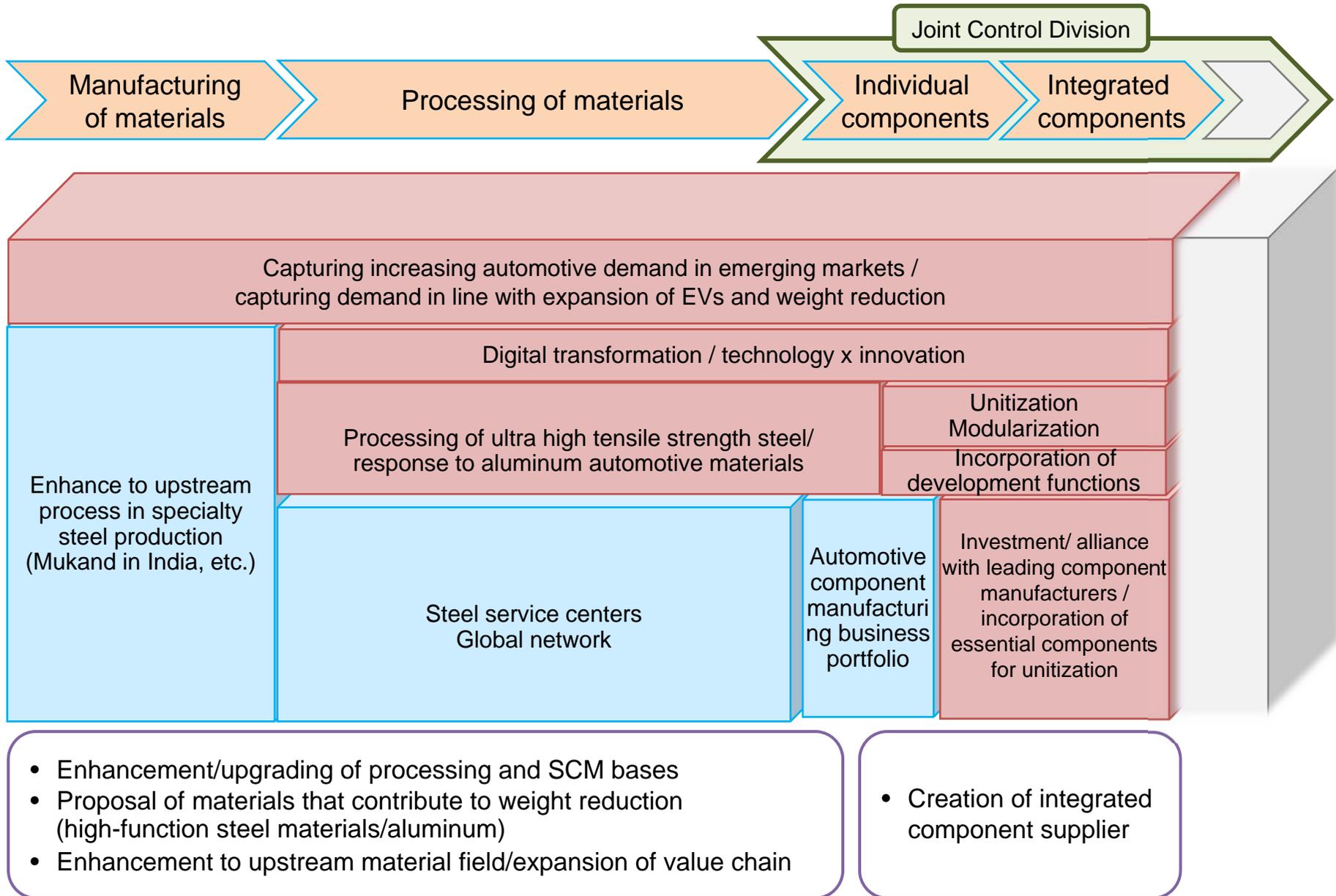
Expansion of value chain in the aluminum-related business

Provision of multiple service capabilities in the railway related business

Reinforcement of business platform base and expansion of product lineup for the tubular products business

Further enhancement of asset efficiency through continuous asset recycle

# Pursuit of Synergy and Expansion of Value Chain in Automotive-related Business



## Growth Strategies for Major Businesses

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Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure

Expansion of value chain in the automotive-related business

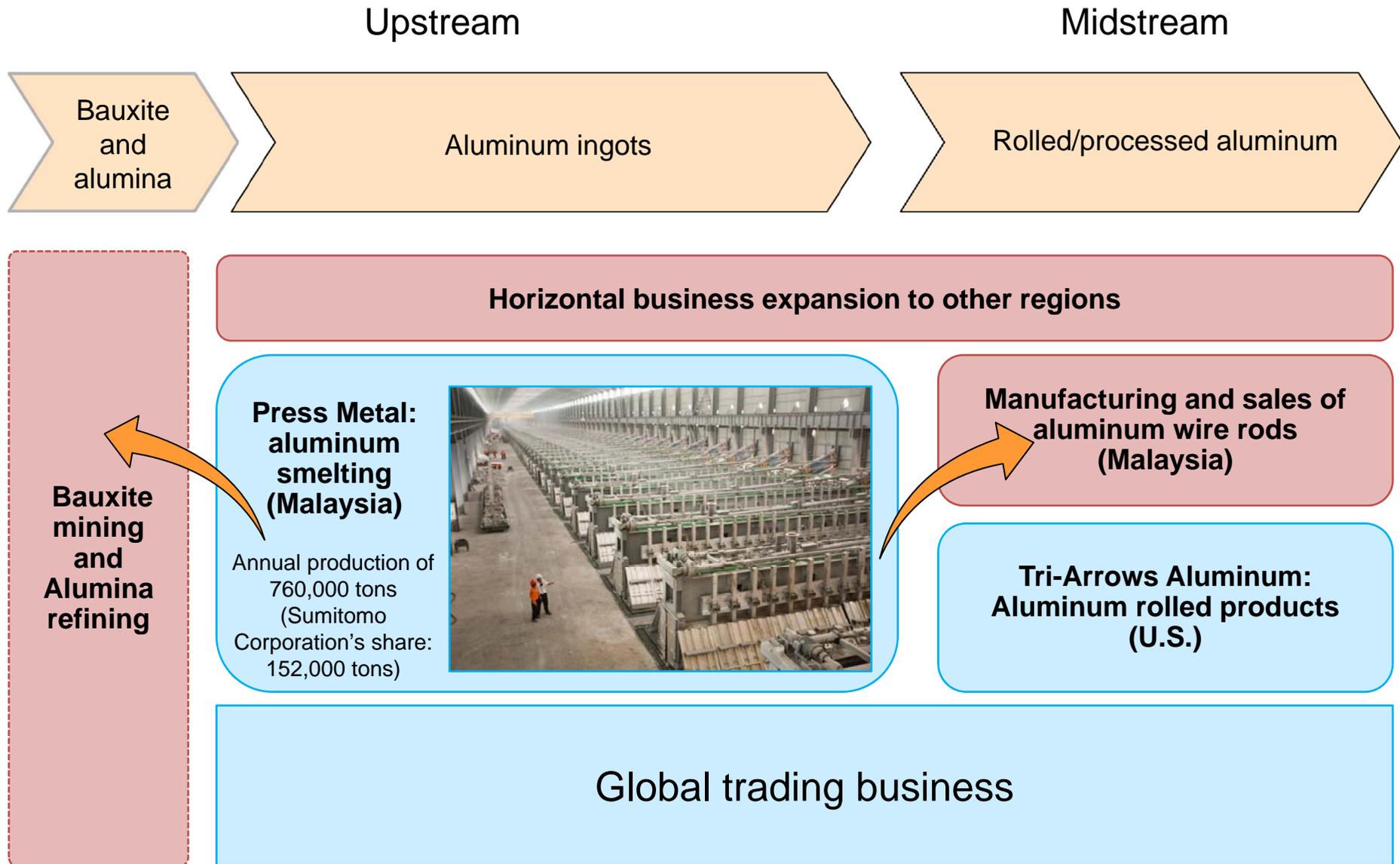
Expansion of value chain in the aluminum-related business

Provision of multiple service capabilities in the railway related business

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Further enhancement of asset efficiency through continuous asset recycle

# Expansion of Aluminum Value Chain



## Growth Strategies for Major Businesses

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Capturing demand for steel products generated by urbanization/renewal and upgrading of infrastructure

Expansion of value chain in the automotive-related business

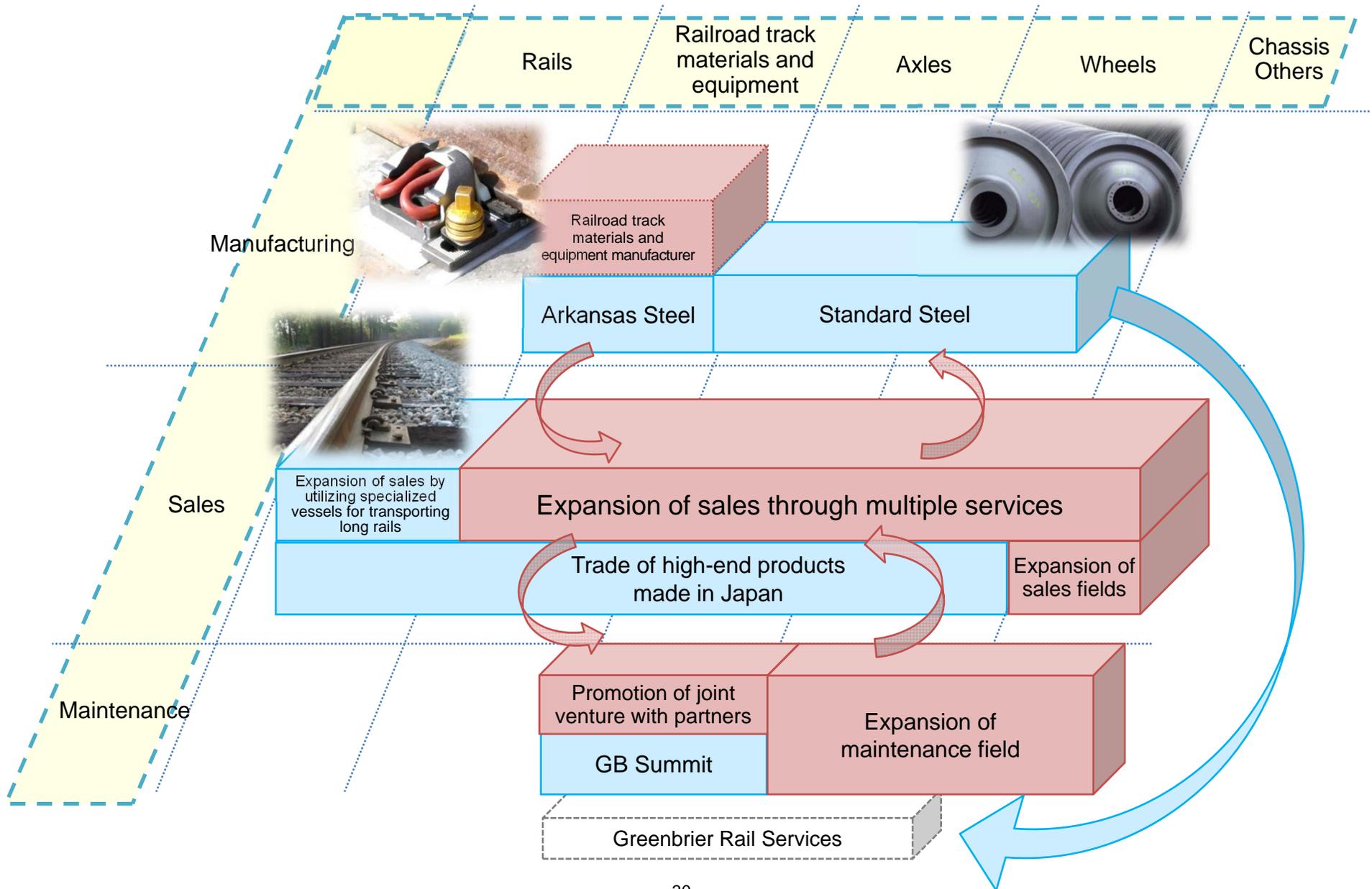
Expansion of value chain in the aluminum-related business

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# Expansion of North American Railway-related Business



## Growth Strategies for Major Businesses

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Expansion of value chain in the automotive-related business

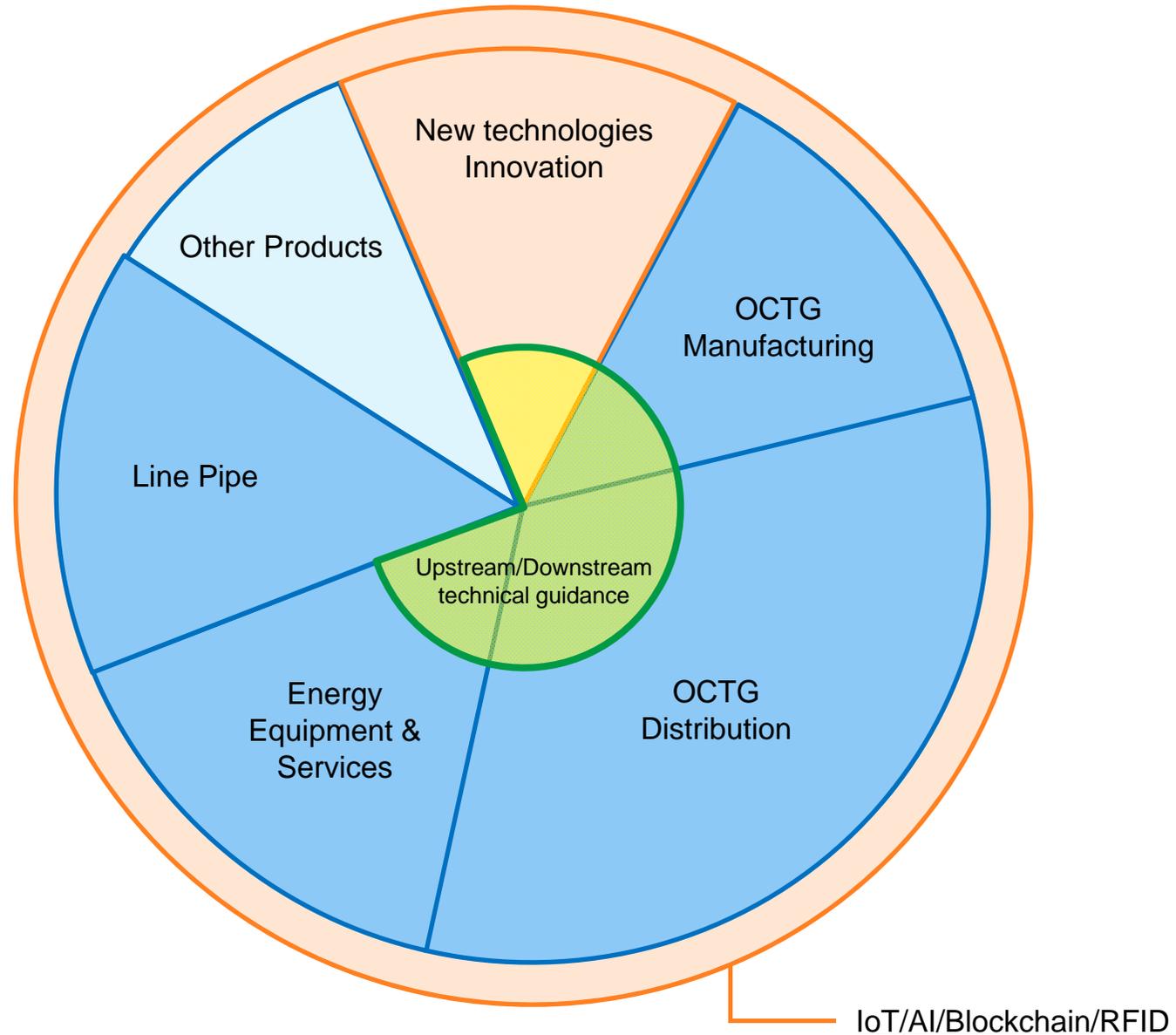
Expansion of value chain in the aluminum-related business

Provision of multiple service capabilities in the railway related business

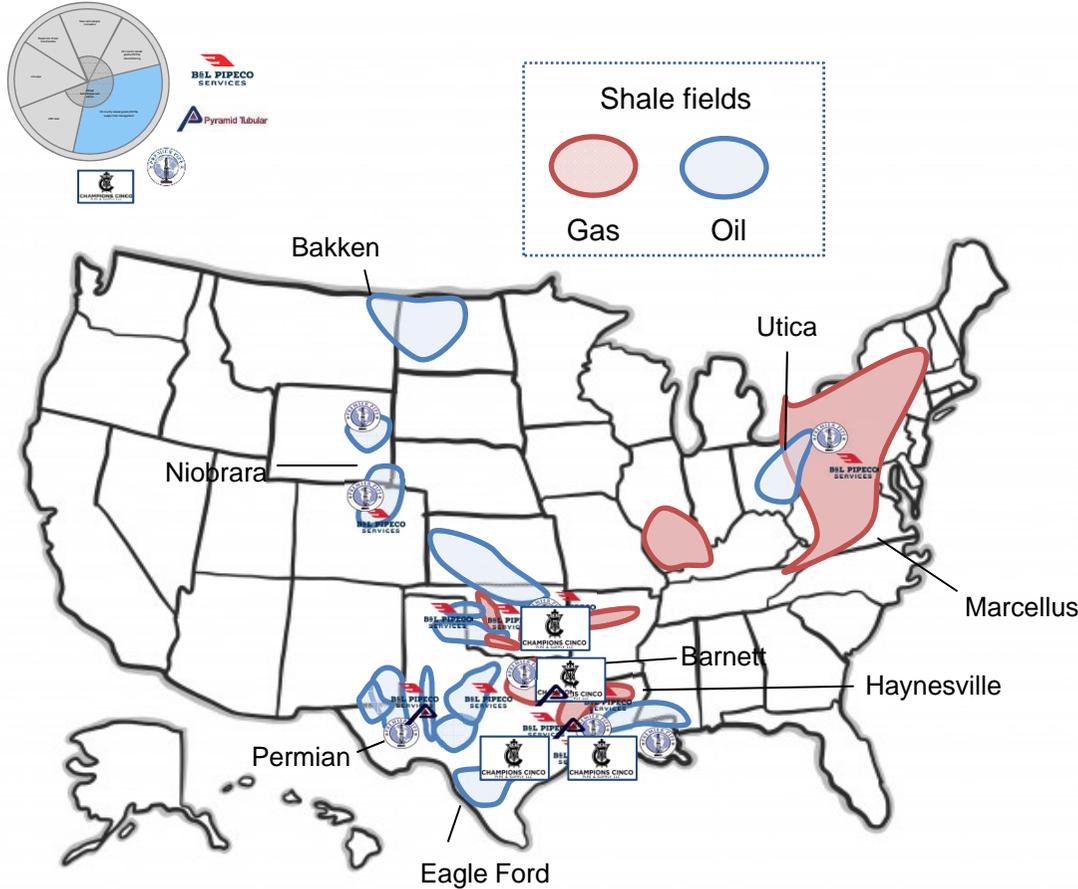
Reinforcement of business platform base and expansion of product lineup for the tubular products business

Further enhancement of asset efficiency through continuous asset recycle

# Core Business Fields of Tubular Products Division



# Acquisition of OCTG Distributor in USA Champions Cinco Pipe & Supply (CCPS)



Locations	Houston, San Antonio, Dallas , Oklahoma
Business	OCTG Distribution & Inventory .

Our existing wide-ranged value chain & expertise in North America  
(From manufacturing & machining to distribution service)

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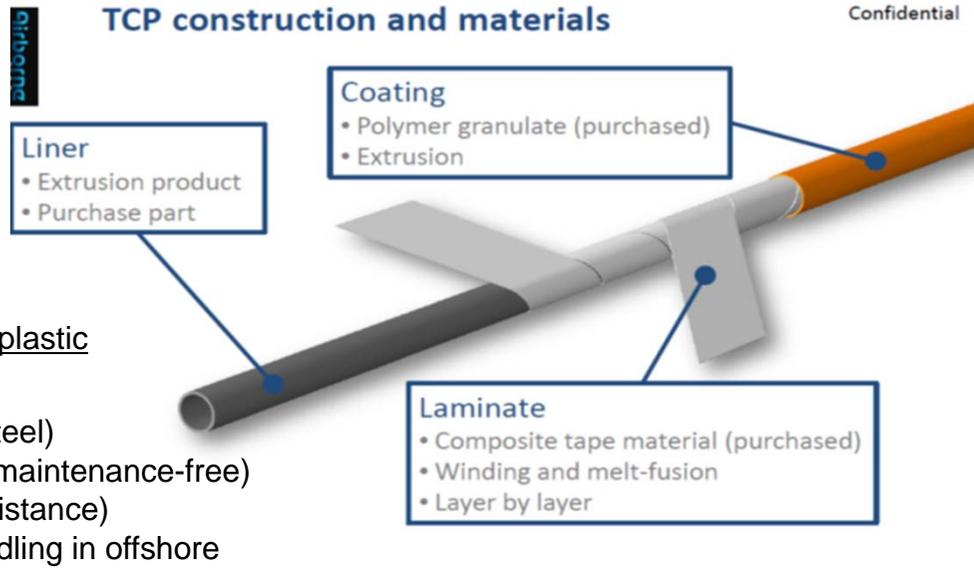
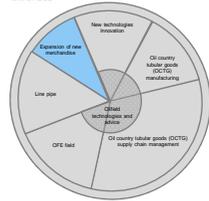
Strength of  
Champions Cinco Pipe & Supply LLC

- Strong customer base including large independent oil & gas companies
- Nationwide sales & logistics Network

- Enhanced value creation for customers, suppliers and other stakeholders through synergy with existing businesses
- Further operational excellence through inventory optimization among the group

# New Investment - Airborne Oil & Gas

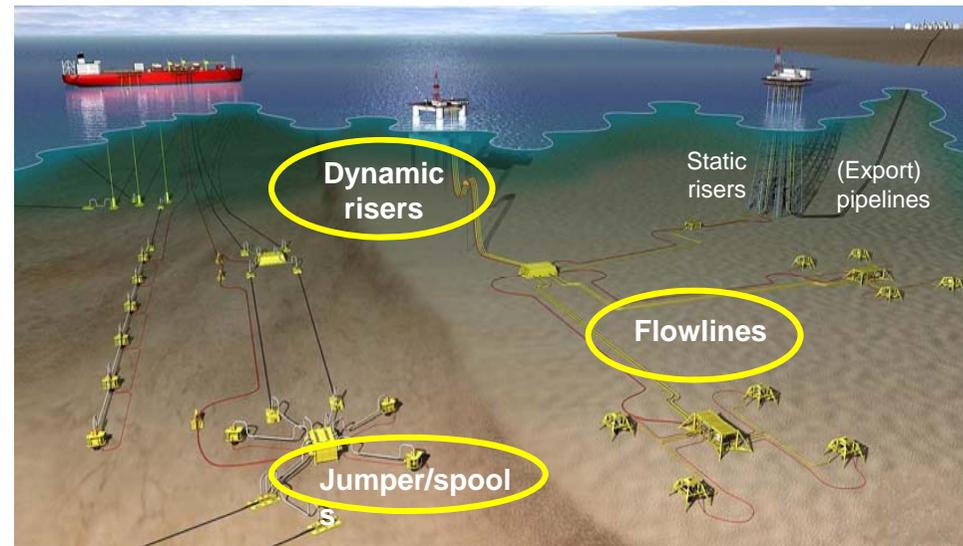
Airborne Oil & Gas



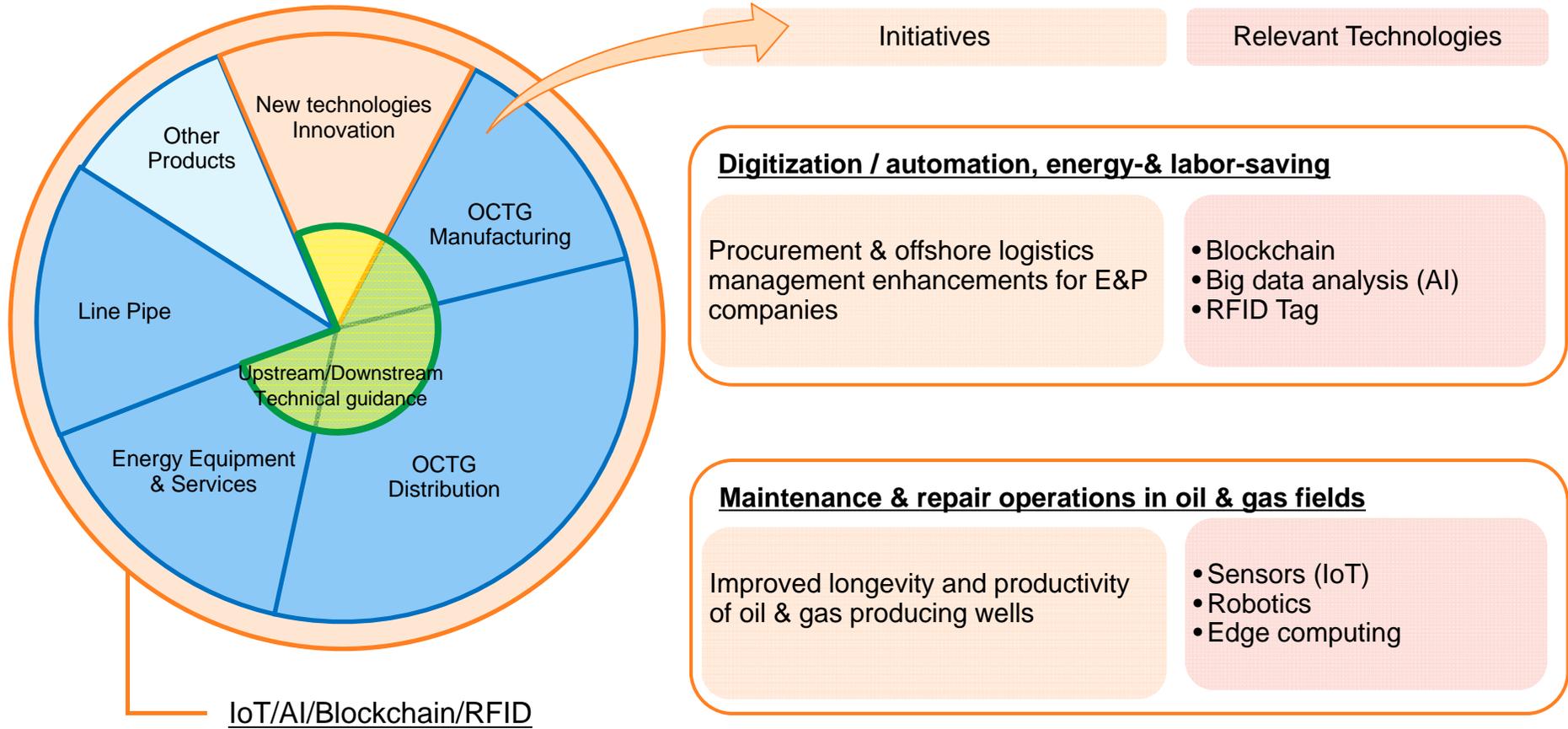
## Characteristics of Thermoplastic Composite Pipes

- (1) Light weight (1/10 of steel)
- (2) Corrosion resistance (maintenance-free)
- (3) Flexibility (bending resistance)
- (4) Long length (easy handling in offshore operations)

- Additional business opportunities in SURF (Subsea, Umbilical, Riser, Flowline) where further market growth is anticipated
- Innovative cost reduction proposal for securing & expanding customer base



# Development of Digital Platform

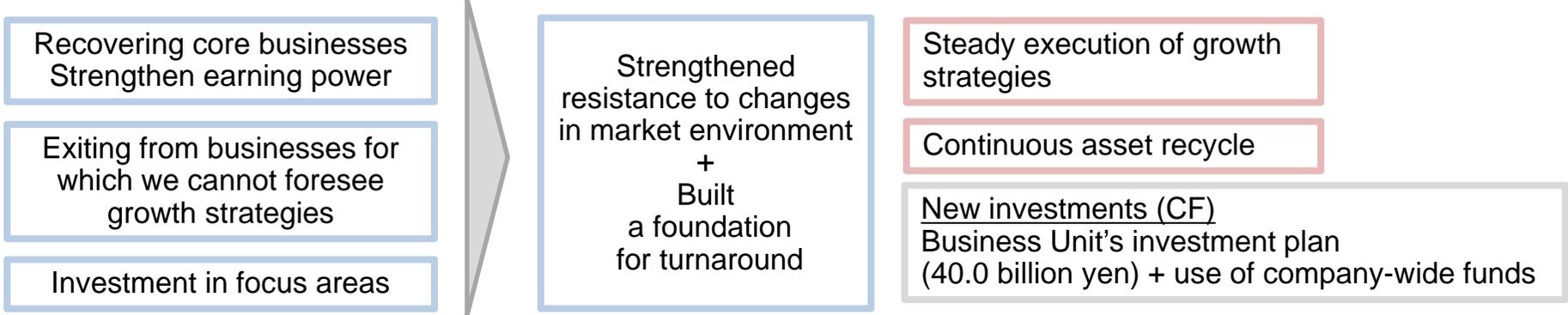
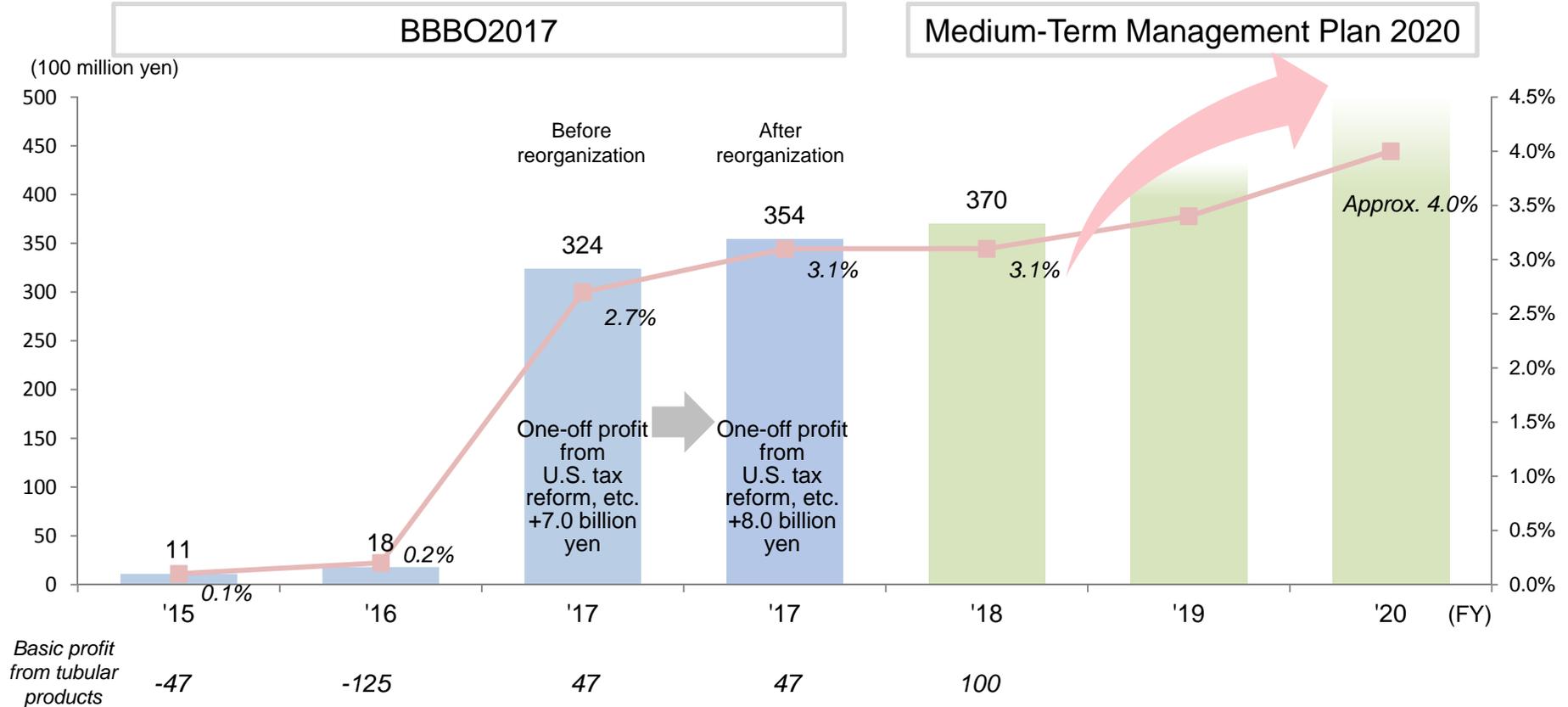


With cross-divisional collaboration

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# Consolidated Net Income/ROA: Results and Plan



# Memo

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